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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,743	08/28/2001	Takeyuki Kawase	33906	5154

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EXAMINER

TRINH, MINH N

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 04/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/940,743

Applicant(s)

KAWASE ET AL.

Examiner

Minh Trinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

1. Receipt is acknowledged of the "conditional" request for RCE application is acceptable and a RCE has been established. An action on the RCE follows.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The following are examples:

a) The limitation recites "they can" (claims 1, 3 and 5) are directed to "the electronic parts" therefore the use of: "the electronic parts" is suggested.

b) "the part suction ratio" (claim 9, line 6) lacks proper antecedent basis.

Note that applicants should carefully review and amend the claims to make it consistent and accurate with the changed to the claim languages in order to clarify the claimed subject matter. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1, 2, 9, 10 and 11 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi et al (EP 0854670). Takashi et al disclose the electronic parts mounting method comprising: moving a suction section, including a plurality of suction nozzles 10, 11, to a part supply section in which a plurality of parts are stored so that they can be sucked at the same time (Fig. 1), sucking the parts stored in the part supply section 4 onto the plurality of suction nozzles at the same time (see the discussion in the abstract, lines 4-6), mounting the sucked parts on a board 19 (col.9, lines 25-38), wherein the suction nozzles classified into groups 10, 11 according to their shift amount, the shift amount of the suction nozzles in each group are within an allowable range for simultaneous suction are set different in each group (see Fig. 1, and the discussion at col. 4, lines 40-45 and col. 17, lines 52-57). Takashi et al do not teach where the electronic parts are being held or sucked by the first and second groups at the same time. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to allow the suction heads to suck or hold the electronic parts at the same time since applicant has not disclosed that these method steps as described above are critical, patentably distinguishing features and it appears that the invention would perform equally well with the suction

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configurations and its operational functions as taught and suggested by the prior art reference (see the discussion of Takashi et al in col. 4, lines 33-52).

As applied to claim 2, Takashi et al teach the shift amount is defined between the parts sucked by the suction nozzles (see the discussion at col. 4, lines 38-44). Note that the elevating and lowering the sucking nozzles of the first and the second mounting heads read on the shift amount which is defined between the parts sucked by the suction nozzles of the present invention.

Regarding the limitations recited in claims 9, 10 and 11, it would have been an obvious matter of design choice to choose any desired operation modes and/or operation configurations such as suction nozzle being classified in to groups which is dependent upon the mounting and application requirement since applicant has not disclosed that the subject matter as claims in these claims are critical and are patentably distinguishing features or is for any particular purpose and it appears that the invention would perform equally well with the teaching provided by the prior art reference (see various embodiments features as discussed in col. 4 of Takashi et al ). Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to discover the working range or ratio configurations according to the shift amount and its operatively allowable range, since it has been held that discovering an optimum working range or value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

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Note that there is no different in the structure elements that associated with the process of the prior art compare to the structure and its method of the instant application.

***Response to Arguments***

6. Applicant's arguments (see under the heading "Remarks", paper No. 14) have been acknowledged.

7. The amendment to the claims language has overcome the claims objection.

***Allowable Subject Matter***

8. Claims 3-8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The reasons for the indication of allowable subject matter as set forth in prior Office Action.

***Prior Art References***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art references are cited for their teaching of method of mounting components.

***Conclusion***

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (703) 305-2887. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (703) 308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Minh Trinh  
Patent Examiner Group 3729

mt  
4/24/2004